

WHAT IS CLAIMED IS:

1. An integrated security and communications system comprising:
 - a security controller having at least one sensory input, at least one alarm output and at least one control signal input/output port;
 - 5 connected to said at least one control signal input/output port;
 - 10 a communications unit connected to a communication channel for providing at least one communication function, and a first communication port for connection to one of said at least one control signal input/output port of said security controller;
 - 15 for providing at least one of said at least one communication function to a user at said control interface.
2. The system of claim 1 wherein:
 - said communication channel comprises a telephone line; and
 - 5 said at least one communication function comprises voice mail.
3. A security system for monitoring user premises, said system comprising:
 - 5 at least one sensor;
 - at least one alarm output device;
 - 10 at least one user control interface;
 - a system controller connected to said sensor, said output device and said user control interface, said at least one user control interface being used by a user to enter commands affecting a state of said system, said system, when said state indicates that said system is active, monitoring said at least one sensor and outputting an alarm on said

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alarm output device when said at least one sensor indicates that an alarm condition exists; and

15 a telephone interface unit connected to said controller and a telephone line for providing voice mail functionality, said voice mail functionality being accessible at at least one of said at least one user control interface.

4. The security system of claim 3 wherein: said voice mail functionality includes one or more of message retrieval, message waiting indication, and message header indication; and

5 access to said voice mail functionality is restricted based on said state of said system.

5. The security system of claim 4 wherein said voice mail functionality is accessible when said state is consistent with presence of an authorized user on said premises.

6. The security system of claim 5 having a plurality of authorized users, wherein:

5 a particular authorized user initiates said state consistent with presence of an authorized user by presenting at said user control interface an indicium unique to said particular authorized user; and
 said telephone interface unit presents for access at said user control interface only voice mail functions addressed to said authorized user.

7. The security system of claim 6 wherein: said user control interface comprises a keypad;

5 said indicium comprises a passcode; and
 said presentation of said indicium comprises entry of said passcode at said keypad.

8. The security system of claim 4 wherein
said voice mail functionality is activated
automatically upon entry of said system into said state
consistent with presence of an authorized user on said
5 premises.

9. The security system of claim 3 further comprising at least one telephone set connected to said telephone line; wherein:

5 said telephone interface unit further provides a call screening function at at least one of (a) said at least one telephone set, and (b) said at least one user control interface.

10. The security system of claim 9 wherein said call screening function comprises an ability to answer a call being screened.

11. The security system of claim 9 wherein:
said user control interface includes a
speaker.

5 said voice mail functionality comprises playback of an outgoing message to an incoming caller; and

10 said call screening function is full-duplex, allowing said incoming caller to speak an announcement that is audible at said speaker during said playback of said outgoing message.

12. The security system of claim 3 further comprising at least one telephone set connected to said telephone line, said least one telephone set having a ringer; wherein:

5 said telephone interface unit further provides a privacy function whereby said ringer can be deactivated under control of a user.

13. The security system of claim 3 wherein said telephone interface unit further comprises a calling party identification unit for displaying calling party identification data, said calling party identification data being displayed at said user control interface.

14. The security system of claim 13 wherein said user control interface includes a speaker; and

5 said telephone interface unit further comprises a voice synthesis unit for announcing said calling party identification data at said speaker.

15. The security system of claim 13 wherein said user control interface includes a speaker;

5 said telephone interface unit comprises memory for storing at least one telephone number and identifying data associated with said telephone number; and

10 when said calling party identification data identifies said stored telephone number, said identifying data are announced at said speaker.

16. The security system of claim 15 wherein said identifying data comprise stored spoken data.

17. The security system of claim 15 wherein said telephone interface unit comprises a voice synthesis unit for announcing said identifying data.

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18. The security system of claim 3 wherein
said voice mail functionality is accessible only to an
authorized user on presentation of an indicium
indicating authorization to access said voice mail
5 functionality.

19. The security system of claim 18 wherein
said indicium indicating authorization to access said
voice mail functionality also is an indicium
authorizing access to said security system.

20. The security system of claim 18 wherein
said indicium indicating authorization to access said
voice mail functionality is different from an indicium
authorizing access to said security system.

21. The security system of claim 18 wherein:
said user control interface comprises a
keypad;
5 said indicium comprises a passcode; and
comprises entry of said passcode at said keypad.

22. The security system of claim 3 wherein:
said voice mail functionality comprises
a plurality of voice mailboxes;
said telephone interface unit comprises
5 a calling party identification unit generating calling
party identification data; and
incoming calls are directed
automatically to one of said plurality of voice
mailboxes based on said calling party identification
10 data.

23. The security system of claim 3 wherein:

said voice mail functionality comprises a plurality of outgoing greeting messages for playback to incoming callers;

5 said telephone interface unit comprises a calling party identification unit generating calling party identification data; and

 said telephone interface unit selects one outgoing greeting message of said plurality of 10 outgoing greeting messages for playback based on said calling party identification data.

24. The security system of claim 3 further comprising at least one telephone set connected to said telephone line through said telephone interface unit; wherein:

5 said telephone interface unit further comprises an auto-redial function; whereby, when a user dials a number using said connected telephone set and said dialed number is busy:

 said telephone interface unit
10 automatically redials said dialed number at predetermined intervals for up to a predetermined duration;

 when said telephone interface unit detects a ringing signal as a result of redialing said 15 dialed number, said telephone interface unit generates an indicium for annunciation at said user control interface to signal said user to engage said connected telephone set.

25. An integrated security and communications method comprising:

 providing a security controller having at least one sensory input, at least one alarm output 5 and at least one control signal input/output port;

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providing a control interface
operatively connected to said at least one control
signal input/output port;

providing a communications unit

10 connected to a communication channel for providing at
least one communication function; and

providing at least one of said at least
one communication function to a user at said control
interface by providing a first communication port for

15 connection to one of said at least one control signal
input/output port of said security controller.

26. The method of claim 25 wherein:
said communication channel comprises a
telephone line; and
said at least one communication function
5 comprises voice mail.

27. A method for monitoring user premises,
said method comprising:
providing at least one sensor;
providing at least one alarm output
5 device;
providing at least one user control
interface;
providing a system controller connected
to said sensor, said output device and said user
10 control interface;
providing a telephone interface unit
connected to said controller and a telephone line for
providing voice mail functionality;
accepting at said at least one user
15 control interface commands entered by a user to affect
a state of said system controller;
when said state indicates that said
system controller is active, monitoring said at least

one sensor and outputting an alarm on said alarm output
20 device when said at least one sensor indicates that an
alarm condition exists; and
 accessing said voice mail functionality
at least one of said at least one user control
interface.

28. The method of claim 27 wherein:
 said voice mail functionality includes
one or more of message retrieval, message waiting
indication, and message header indication; said method
5 further comprising:
 restricting access to said voice mail
functionality based on said state of said system
controller.

29. The method of claim 28 wherein said
voice mail functionality is accessible when said state
is consistent with presence of an authorized user on
said premises.

30. The method of claim 29, wherein:
 there are a plurality of authorized
users; and
 a particular authorized user initiates
5 said state consistent with presence of an authorized
user by presenting at said user control interface an
indicium unique to said particular authorized user;
said method further comprising:
 presenting for access at said user
control interface only voice mail functions addressed
10 to said authorized user.

31. The method of claim 30 further
comprising:

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providing a keypad at said user control interface; wherein:

5 said indicium comprises a passcode; and
 said presentation of said indicium
 comprises entry of said passcode at said keypad.

32. The method of claim 28 further comprising activating said voice mail functionality automatically upon entry of said system into said state consistent with presence of an authorized user on said 5 premises.

33. The method of claim 27 wherein:
 at least one telephone set is connected to said telephone line; said method further comprising:
 providing a call screening function at 5 at least one of (a) said at least one telephone set, and (b) said at least one user control interface.

34. The method of claim 33 wherein said call screening function comprises an ability to answer a call being screened.

35. The method of claim 33 wherein:
 said user control interface includes a speaker;
 said voice mail functionality comprises 5 playback of an outgoing message to an incoming caller; and
 said call screening function is full-duplex, allowing said incoming caller to speak an announcement that is audible at said speaker during 10 said playback of said outgoing message.

36. The method of claim 27 wherein:

at least one telephone set is connected to said telephone line, said least one telephone set having a ringer; said method further comprising:

5 providing a privacy function whereby said ringer can be deactivated under control of a user.

37. The method of claim 27 wherein:
said telephone interface unit further comprises a calling party identification unit for displaying calling party identification data; said
5 method further comprising:
displaying said calling party identification data at said user control interface.

38. The method of claim 37 wherein:
said user control interface includes a speaker; and
said telephone interface unit further
5 comprises a voice synthesis unit; said method further comprising:
synthesizing said calling party identification data and announcing said calling party identification data at said speaker.

39. The method of claim 37 wherein:
said user control interface includes a speaker; said method further comprising:
storing at least one telephone number
5 and identifying data associated with said telephone number at said telephone interface unit; and
when said calling party identification data identifies said stored telephone number,
announcing said identifying data at said speaker.

40. The method of claim 39 wherein said identifying data comprise stored spoken data.

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41. The method of claim 39 wherein:
said telephone interface unit comprises
a voice synthesis unit; said method further comprising:
synthesizing and announcing said
5 identifying data.

42. The method of claim 27 wherein said
voice mail functionality is accessible only to an
authorized user on presentation of an indicium
indicating authorization to access said voice mail
5 functionality.

43. The method of claim 42 wherein said
indicium indicating authorization to access said voice
mail functionality also is an indicium authorizing
access to said security system.

44. The method of claim 42 wherein said
indicium indicating authorization to access said voice
mail functionality is different from an indicium
authorizing access to said security system.

45. The method of claim 42 further
comprising:
providing a keypad at said user control
interface; wherein:
5 said indicium comprises a passcode; and
said presentation of said indicium
comprises entry of said passcode at said keypad.

46. The method of claim 27 wherein:
said voice mail functionality comprises
a plurality of voice mailboxes; and
said telephone interface unit comprises
5 a calling party identification unit generating calling

party identification data; said method further comprising

10 directing incoming calls automatically to one of said plurality of voice mailboxes based on said calling party identification data.

47. The method of claim 27 wherein:
said voice mail functionality comprises
a plurality of outgoing greeting messages for playback
to incoming callers; and

5 said telephone interface unit comprises
a calling party identification unit generating calling
party identification data; said method further
comprising:

selecting one outgoing greeting message
10 of said plurality of outgoing greeting messages for
playback based on said calling party identification
data.

48. The method of claim 27 wherein:
at least one telephone set is connected
to said telephone line through said telephone interface
unit and said telephone interface unit further
comprises an auto-redial function; said method further
comprising:

when a user dials a number using said connected telephone set and said dialed number is busy, automatically redialing said dialed number at 10 predetermined intervals for up to a predetermined duration; and

when said telephone interface unit
detects a ringing signal as a result of redialing said
dialed number, generating an indicium for annunciation
15 at said user control interface to signal said user to
engage said connected telephone set.

49. An integrated security and communications system comprising:

security controller means having at least one means for accepting sensory input, at least 5 one means for outputting an alarm and at least one control signal input/output port;

control interface means operatively connected to said at least one control signal input/output port;

10 means connected to a communication channel for providing at least one communication function, and a first communication port for connection to one of said at least one control signal input/output port of said security controller means for providing at 15 least one of said at least one communication function to a user at said control interface means.

50. The system of claim 49 wherein:

said communication channel comprises a telephone line; and

said at least one communication function 5 comprises voice mail.

51. A security system for monitoring user premises, said system comprising:

at least one means for sensing;

at least one means for outputting an 5 alarm;

at least one user control interface means;

system controller means connected to said means for sensing, said means for outputting an 10 alarm and said user control interface means, said at least one user control interface means being used by a user to enter commands affecting a state of said system, said system, when said state indicates that

15 said system is active, monitoring said at least one means for sensing and outputting an alarm on said means for outputting an alarm when said at least one means for sensing indicates that an alarm condition exists; and

a telephone interface means connected to
20 said controller means and a telephone line for
providing voice mail functionality, said voice mail
functionality being accessible at at least one of said
at least one user control interface means.

52. The security system of claim 51 wherein:
said voice mail functionality includes
one or more of message retrieval, message waiting
indication, and message header indication; and

5 access to said voice mail functionality
is restricted based on said state of said system.

53. The security system of claim 53 wherein said voice mail functionality is accessible when said state is consistent with presence of an authorized user on said premises.

54. The security system of claim 54 having a plurality of authorized users, wherein:

a particular authorized user initiates
said state consistent with presence of an authorized
5 user by presenting at said user control interface means
an indicium unique to said particular authorized user;
and

10 said telephone interface means presents
for access at said user control interface means only
voice mail functions addressed to said authorized user.

55. The security system of claim 55 wherein:

said user control interface means comprises keypad means;

5 said indicium comprises a passcode; and
 said presentation of said indicium comprises entry of said passcode at said keypad means.

56. The security system of claim 53 wherein said voice mail functionality is activated automatically upon entry of said system into said state consistent with presence of an authorized user on said 5 premises.

57. The security system of claim 51 further comprising at least one telephone set connected to said telephone line; wherein:

5 said telephone interface means further provides a call screening function at at least one of (a) said at least one telephone set, and (b) said at least one user control interface means.

58. The security system of claim 58 wherein said call screening function comprises an ability to answer a call being screened.

59. The security system of claim 58 wherein:
 said user control interface means includes speaker means;
 said voice mail functionality comprises 5 playback of an outgoing message to an incoming caller; and
 said call screening function is full-duplex, allowing said incoming caller to speak an announcement that is audible at said speaker means 10 during said playback of said outgoing message.

60. The security system of claim 51 further comprising at least one telephone set connected to said telephone line, said least one telephone set having means for ringing; wherein:

5 said telephone interface means further provides a privacy function whereby said means for ringing can be deactivated under control of a user.

61. The security system of claim 51 wherein
said telephone interface means further comprises a
means for displaying calling party identification data,
said calling party identification data being displayed
5 at said user control interface means.

62. The security system of claim 62 wherein:
said user control interface means
includes speaker means; and
said telephone interface means further
5 comprises means for synthesizing voice for announcing
said calling party identification data at said speaker
means.

63. The security system of claim 62 wherein:
said user control interface means
includes speaker means;
said telephone interface means comprises
5 means for storing at least one telephone number and
identifying data associated with said telephone number;
and
when said calling party identification
data identifies said stored telephone number, said
10 identifying data are announced at said speaker means.

64. The security system of claim 64 wherein said identifying data comprise stored spoken data.

65. The security system of claim 64 wherein said telephone interface means comprises means for synthesizing voice for announcing said identifying data.

66. The security system of claim 51 wherein said voice mail functionality is accessible only to an authorized user on presentation of an indicium indicating authorization to access said voice mail
5 functionality.

67. The security system of claim 67 wherein said indicium indicating authorization to access said voice mail functionality also is an indicium authorizing access to said security system.

68. The security system of claim 67 wherein said indicium indicating authorization to access said voice mail functionality is different from an indicium authorizing access to said security system.

69. The security system of claim 67 wherein:
said user control interface means
comprises keypad means;
5 said indicium comprises a passcode; and
said presentation of said indicium
comprises entry of said passcode at said keypad means.

70. The security system of claim 51 wherein:
said voice mail functionality comprises
a plurality of voice mailboxes;
said telephone interface means comprises
5 calling party identification means generating calling
party identification data; and
incoming calls are directed
automatically to one of said plurality of voice

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mailboxes based on said calling party identification
10 data.

71. The security system of claim 51 wherein:
said voice mail functionality comprises
a plurality of outgoing greeting messages for playback
to incoming callers;

5 said telephone interface means comprises
means for generating calling party identification data;
and

10 said telephone interface means selects
one outgoing greeting message of said plurality of
outgoing greeting messages is for playback based on
said calling party identification data.

72. The security system of claim 51 further
comprising at least one telephone set connected to said
telephone line through said telephone interface means;
wherein:

5 said telephone interface means further
comprises an auto-redial function; whereby, when a user
dials a number using said connected telephone set and
said dialed number is busy:

10 said telephone interface means
automatically redials said dialed number at
predetermined intervals for up to a predetermined
duration;

15 when said telephone interface means
detects a ringing signal as a result of redialing said
dialed number, said telephone interface means generates
an indicium for annunciation at said user control
interface means to signal said user to engage said
connected telephone set.

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